Amendments to the Claims:

Listing of Claims:

1. (Currently amended): A method of preparing a composition having reduced ~~reducing~~ bacterial virulence of a pathogenic bacteria, comprising:

providing a virulent bacteria having a DNA methyltransferase (Dam) activity; and

contacting the bacteria with an agent that prevents ~~alters~~ the bacteria's ~~native level of DNA methyltransferase (Dam) activity~~ *dam* gene expression thereby altering the bacteria's native level of methylation of adenine in a GATC tetranucelotide of the bacteria, and thereby reducing virulence of the bacteria.

2. (Canceled)

3. (Currently amended): The method of claim 1, wherein the agent ~~reduces the Dam activity by~~ causes a deletion within ~~reducing~~ the bacteria's ~~level of expression of Dam~~ *dam* gene.

4. (Canceled)

5. (Original): The method of claim 1, wherein the agent is a d*am* gene construct that expresses [[increases the bacteria's native level of]] DNA methyltransferase. ~~activity.~~

6. (Currently amended): The method of claim 1, wherein the agent causes ~~reduces the bacteria's native level of methylated adenine in a GATC tetranucleotide by inhibiting DNA methyltransferase activity.~~ an insertion within the *dam* gene.

7. (Currently amended): The method of claim [[1]] 5, wherein the agent ~~that increases the bacteria's native level of methylated adenine in a GATC tetranucleotide by increasing DNA methyltransferase activity~~ comprises a plasmid comprising said *dam* gene construct.

8. (Canceled)

9. (Currently amended): The method of claim 1, wherein the agent binds a native *dam* nucleic acid sequence of the bacteria and prevents ~~decreases~~ expression of a Dam gene ~~below a native level~~.

10. (Currently amended): The method of claim 1, wherein the agent [[binds]] contains a native nucleic acid sequence of the bacteria and expresses ~~increases expression of~~ a Dam gene [[above a native level]].

11. (Previously presented): The method of claim 1, wherein the agent alters Dam activity of a pathogenic bacteria selected from the group consisting of *Neisseria meningitidis*, *Pasteurella multocida*, and *Shigella spp.*

12. (Original): The method of claim 1, wherein the agent alters native Dam activity of a pathogenic bacteria selected from the group consisting of *Escherichia*, *Vibrio*, *Yersinia* and *Salmonella.*

13. (Currently amended): The method of claim 12, wherein the pathogenic bacteria are [[a]] salmonella bacteria selected from the group consisting of *S. typhimurium, S. enteritidis, S. typhi, S. abortus-ovi, S. abortus-equi, S. Dublin, S. gallinarum, and S. pullorum.*

14. (Original): The method of claim 12, wherein the pathogenic bacteria are *E. coli.*

15. (Original): The method of claim 12, wherein the bacteria are *V. cholerae.*

16. (Currently amended): The method of claim 12, wherein the bacteria are *Y. ~~psuedotuberculosis~~. pseudotubercolosis.*

17. (Previously presented): The method of claim 1, wherein the agent alters native Dam activity of a pathogenic bacteria selected from the group consisting of *Shigella*, *Haemophilus*, *Bordetella*, *Neisseria*, *Pasteurella* and *Treponema*.

18. (Original): The method of claim 1, wherein the bacteria are *Haemophilus*.

19 -23. (Canceled)

24. (Currently amended): A method of treating a pathogenic bacterial infection by inhibiting proliferation of the bacteria, comprising the steps of:

administering to a subject infected with the pathogenic bacteria a therapeutically effective amount of a composition comprising a pharmaceutically acceptable carrier and an active agent comprising a bacteria having therein an alteration in a *dam* gene that alters the bacteria's native level of DNA methyltransferase (Dam) activity[[;]]. ~~and~~

~~allowing the agent to contact the bacteria for a period of time and under conditions so as to inhibit proliferation of the bacteria.~~

25 – 27. (Canceled)

28. (Currently amended): The method of claim 24, wherein the agent comprises a *dam* genetic construct that expresses [[increases the level of]] Dam activity thereby increasing methylation of adenine in a GATC tetranucleotide in the bacteria, thereby inhibiting proliferation of the bacteria.

29. (Original): The method of claim 24, wherein the subject is a mammal.

30. (Original): The method of claim 24, wherein the subject is a human.

31. (Original): The method of claim 24, wherein the administering is by a route selected from the group consisting of oral, injection, inhalation and topical.

32. (Currently amended): The method of treating bacterial infection in an individual comprising administering to the individual [[an agent that reduces the level or activity of a]] an attenuated bacteria having a deletion in its DNA methyltransferase gene thereby reducing methylation of adenine in a GATC tetranucleotide in the bacteria, thereby inhibiting the virulence of the bacteria.

33. (Original): The method of claim 32, wherein the reduction of the level of methylated adenine in a GATC tetranucleotide is effected by inhibiting DNA methyltransferase activity.

34 -46. (Canceled)

47. (New): The method of claim 1 wherein the agent is a polynucleotide.

48. (New): A method of treating a pathogenic bacterial infection by inhibiting proliferation of the bacteria, comprising the steps of:

administering to a subject infected with the pathogenic bacteria a therapeutically effective amount of a composition comprising a pharmaceutically acceptable carrier and an active agent comprising a bacteria having therein an alteration in its native *dam* gene that alters the bacteria's native level of DNA methyltransferase (Dam) activity, said alteration selected from the group consisting of: an insertion in the *dam* gene; a deletion in the *dam* gene; and an additional copy of a *dam* gene for overproducing Dam methylase.

49. (New): The method of claim 47 wherein said bacteria having an alteration is selected from the group consisting of: *Escherichia*, *Vibrio*, *Yersinia* and *Salmonella*.

50. (New): The method of claim 48 wherein said bacteria having an alteration is of a different species than said pathogenic bacterial infection.